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REMARKS

Reconsideration of the application as amended is requested.

In the Office Action dated September 1, 2005, claims 1-14 were rejected under 35 U.S.C. §101 for being "directed to non-statutory subject matter." The Office Action states that "specifically, there is no technological innovation included in the limitations."

A recent decision by the United States Patent and Trademark Office Board of Patent Appeals and Interferences has explicitly rejected the "technological arts" test. See *Ex parte Lundgren*, BPAI 2003-2088 (Sept. 2005) ("Our determination is that there is currently no judicially recognized separate 'technological arts' test to determine patent eligible subject matter under §101"). Accordingly, claims 1-14 are believed to be directed to statutory subject matter.

Claims 1-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,093,794 to Howe et al. Applicant respectfully submits that all of the pending claims, as amended herein, patentably distinguish over the cited references.

Claim 1 has been amended to recite a method for *constructing a building* and handling construction project information related to the construction of the building. The steps include performing a plurality of construction stages including plumbing at least one of the buildings. Support for this amendment is in the specification at, for example, page 15, lines 1-11.

Howe '794 is completely different than Applicant's invention, both conceptually and in operation. At column 2, lines 7-17, Howe '794 states that:

The invention relates to an improved shop scheduling system referred to as the Cooperative Scheduling System (CSS) in which a central routine, the Work Order Manager (WOM) interacts with a set of sub-routines representing shop resources comprising one or more machines to first set a planned schedule allowing for finite shop capacity at "bottlenecks" in a planning mode and then, in an operational mode, to correct and modify the schedule to accommodate for inevitable delays, machine breakdowns, changes in priority, etc. (Emphasis added).

The planning mode produces an estimated target date for each work order and operation within the work order, and produces estimates as constrained by resource capacity. At column 2, lines 52-57, Howe '794 states that "In Cooperative Scheduling, the philosophy that throughput

should be throttled by the most critical shop resources [machines] is adopted. Planning mode uses this assumption to constrain schedules by identifying the critical shop resources [machines] and scheduling all routes that pass through them first." At column 3, lines 25-41, Howe '794 further states that "Operational mode uses the weighted tardiness measure established in the planning mode to support decisions in the short term. There are two types of decisions which must be supported: releasing decisions and reacting decisions." Releasing decisions determine what job should be released next to this work center. Howe '794 further states that "Planning mode produces a list of work predicted for each work center. At execution time, this list is sequenced according to the weighted tardiness measure: the route which will contribute to an on time shop the most goes first." *Id.* And also states that "Reacting decisions are made when new information affecting a planned schedule is received or when assumptions have changed. . . . the best way is measured according to the weighted tardiness measure." *Id.*

Howe '794 deals with the problem of utilizing computer routines to allocate a large number of parts to be fabricated among groups of machines that perform different operations on the parts. In Howe '794, the parts are moved between the various groups of machines for performing various operations, and the priority of the various parts is determined by the "weighted tardiness measure" according to the programmed routines. Howe '794 creates schedules for the parts to determine the order in which the parts are moved around within a shop so the various operations can be performed at different groups of machines.

Thus, Howe '794 is designed to deal with situations that do not exist in home building.

Furthermore, it is not at all clear that Howe '794 could be modified to provide for job scheduling of home building. For example, each of the "Resource Brokers" (BROs) of Howe '794 are associated with a group of machines that perform operations on the parts being fabricated. The BROs have programmed routines which may run on local workstations (col. 3, lines 59-63), and the BRO routines notify the Work Order Manager (WOM) if a new start time is not possible (col. 3, lines 42-50). Both final scheduling and the first attempt at schedule recovery are "delegated" to the BRO routines (col. 3, lines 59-61). How this could be implemented to provide for home building control and inquiry is very unclear. What,

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specifically, would the BROs do? Applicant has reviewed Howe '794 in detail, and can find no teaching or suggestion to modify the BRO computer routines to provide for input from a home builder or client (homebuyer). Furthermore, it is also very unclear how a "weighted tardiness measure" implemented via an automatic computer routine to alleviate bottlenecks and schedule a large number of parts requiring various fabrication steps, could be used in constructing a building such as a house. How would the Howe '794 system utilize the "weighted tardiness measure", a measure of the product priority and number of days late (col. 2, lines 47-50), when there are not any parts to be given priority and no groups of machines to which the parts are scheduled?

Furthermore, "In order to render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method." *Motorola, Inc. v. Interdigital Technology Corp.*, 43 USPQ 2d 1481, 1489 (Fed. Cir. 1997) (emphasis added) (quoting *Beckman Instruments, Inc. v. LKB Produkter AB*, 13 USPQ 2d 1301, 1304 (Fed. Cir. 1989)). Given the substantial modifications that would be required to utilize Howe '794 in building construction, Applicant submits that Howe '794 is not enabling.

Applicant further notes that "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP 2143.01(VI), citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (emphasis added).

Although it is quite unclear if Howe '794 could be modified to the extent necessary to provide a construction work control and inquiry system, such extensive modification would most certainly render Howe '794 unsuited for its original purpose. As discussed in more detail above, Howe '794 provides a computer routine that automatically schedules parts to be fabricated utilizing a variety of machines in a shop. The Cooperative Scheduling System utilizes a "weighted tardiness measure" in resolving bottlenecks and for scheduling of the machines. Also, all of the communication between the WOMs and the BROs appears to be done automatically via computer code utilizing the "weighted tardiness measure." Applicant is not aware of any way to modify Howe '794 to provide a construction control and inquiry

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system without rendering Howe '794 unsuitable for automatic scheduling of parts and machines in a shop.

According to MPEP 2143, one of the requirements that must be met to establish a prima facie case of obviousness is that there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Applicants respectfully request that the Examiner point out the required suggestion or motivation Howe '794 itself. Alternately, to the extent the Examiner is relying upon knowledge generally available to one of ordinary skill in the art, Applicants respectfully request that the Examiner articulate that knowledge and place it on the record. *See In re Lee*, 277 F.3d 1338, 1345, 61 USPQ2d 1430, 1433-35 (Fed. Cir. 2002) (when an Examiner relies on general knowledge to negate patentably, that knowledge must be articulated and placed on the record). *See also In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Applicant further notes that "It is impermissible within the framework of §103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." *In re Wesslau*, 353 F.2d 238, 241, 147 USPQ 391, 393 (CCPA 1965); see also *In re Mercer*, 515 F.2d 1161, 1165-66, 185 USPQ 774, 778 (CCPA 1975). Applicant submits that when Howe '794 is considered in its entirety for what it fairly suggests to one of ordinary skill in the art (without the benefit of Applicant's specification; MPEP 2144.04), Howe '794 does not teach or suggest Applicant's claimed invention.

Howe '794 does not in any way teach or suggest constructing a building, including performing a plurality of construction stages including plumbing of at least one building. Also, as discussed in more detail above, Howe '794 deals with a completely different problem in a completely different situation than does Applicant's method for constructing a building and handling construction project information as recited in amended claim 1.

Claims 2-14 depend from claim 1, and are therefore believed to be allowable for those reasons set forth above in connection with claim 1.

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Claim 15 recites, among other features, a control and inquiry computer system, and a home builder computer system coupled to a computer network, wherein the home builder computer system is remote from the control and inquiry computer system. Claim 15 also recites a client computer system coupled to the computer network, wherein the client computer system is remote from the home builder computer system and the control and inquiry computer system. Applicant respectfully submits that Howe '794 does not disclose or suggest any such arrangement. Applicant's claimed system permits a home builder to update the information on the control and inquiry computer system from a remote location, and also permits a client to access the control and inquiry computer system from a different remote location. As discussed above, Howe '794 deals with the problem of scheduling parts in a shop having a variety of machine groups. Applicant can find no teaching or suggestion in Howe '794 to provide home builder and client computer systems that are remote from a control and inquiry computer system that receives design, scheduling, work progress, and change order information for a building.

Claims 16-28 depend from claim 15, and are therefore believed to be allowable for those reasons set forth above in connection with amended claim 15.

Furthermore, claim 19 has been amended to recite that the control and inquiry code causes the control and inquiry system to perform the additional step of prompting at least one of the general contractor and the site superintendent to input day by day work progress information. Support for this amendment can be found at page 4 of Applicant's specification. Applicant can find no teaching or suggestion in Howe '794 to provide a prompting arrangement to input day by day work progress information.

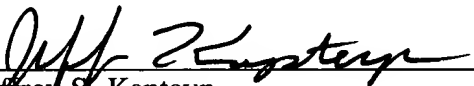
Claim 29 has been amended to recite that the home builder and client computer systems are remote from the control and inquiry computer system. Applicant respectfully submits that Howe '794 does not teach or suggest any such arrangement for those the same reasons set forth above with respect to claim 15. Also, as discussed in detail above, substantial modifications of Howe '794 would be required to provide a computer system performing the steps of receiving content information related to a design of a building, work schedule information, work progress information and change order information for a building.

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Applicant has made a concerted effort to the place the present application in condition for allowance, and a notice to this effect is earnestly solicited. In the event there are any remaining informalities, the courtesy of a telephone call to the undersigned attorney would be appreciated.

Respectfully submitted,

12/1/05
Date



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